ABB Ability™ Condition Monitoring for measurement devices
Maintenance made easy
ABB Ability™ Condition monitoring for measurement devices provides you fact-based insights for your gas analyzers by monitoring analyzer KPIs, enabling higher analyzer availability and measurement accuracy.

Remote monitoring of the analyzer provides you with event-based reports which lets you identify deviations before they become major problems.
Step into the digital era with us

Would you like to have peace of mind, knowing that everything is working as it should? And if required there will be fast expert remote support available without waiting for someone to be at the site?

Analyzer downtime and unexpected errors can be costly and disruptive to your operations. Identifying and resolving these issues quickly is crucial to maintaining productivity and minimizing maintenance expenses. However, traditional manual monitoring methods often result in delayed detection and inefficient troubleshooting, leading to prolonged downtime and increased costs.

ABB Ability™ Condition Monitoring addresses these challenges by providing real-time insights into your analyzer’s health and performance. By seamlessly connecting to your analyzers through an edge device, our solution collects, analyzes and reports data, empowering you to proactively identify errors and take preventive measures.

By continuously monitoring key parameters, our solution enables you to optimize your analyzer’s performance and operations. Real-time insights and detailed reports allow you to identify patterns, trends, and potential areas for improvement. This empowers you to fine-tune your operations, enhance efficiency, and maximize productivity.

Streamline analyzer management with remote monitoring:
Effortlessly access vital analyzer data from any location, at any time, enhancing safety and efficiency by eliminating the need for on-site checks and minimizing potential hazards for technicians.

Stay one step ahead of potential problems:
Safeguard your operations by swiftly identifying initial indicators of potential failures and evaluating associated risks, allowing you to address concerns before they escalate into critical maintenance challenges, thus minimizing downtime and ensuring continuous productivity.

Maximize cost efficiency with enhanced ownership:
Revolutionize your maintenance strategy through automated data analysis, swiftly detecting crucial deviations in analyser status and furnishing both on-site teams or ABB with actionable insights, thus optimizing operational expenditures while ensuring top-tier expertise utilization.

Make informed choices through data driven insights:
Empower Informed Choices through Data-Driven Insights: Access historical data in PDF/csv/json format, facilitating informed and secure operational management for enhanced decision-making precision, enabling high asset availability.
Unlocking the power of data: Flexible options to generate reports with deep insights of analyzer health

Empower your team with ABB Ability™ Condition Monitoring for measurement devices by providing deep insights into the health of your analyzers. This advanced digital solution gives you the freedom to generate three types of reports tailored to your specific needs, allowing you to make data-driven decisions with precision and confidence.

Scheduled report - Plan for data-driven success:
Stay ahead of maintenance cycles and optimize operations with our scheduled report option. Set the date and time as per your convenience, and our condition monitoring solution will automatically generate the report. Gain a comprehensive overview of your analyzers’ performance regularly, allowing you to proactively plan maintenance and mitigate potential issues.

Event-based report - Instantaneous insights for critical events:
Never miss a beat with our event-based reporting feature. When an analyzer transitions into maintenance mode or encounters a critical event, our system triggers an instantaneous report. React swiftly to emerging situations, diagnose root causes promptly, and take proactive measures to safeguard equipment health and maximize uptime.

On-demand report - Directly from User Interface (UI):
Harness the convenience of on-demand reporting with our manual report feature. Access the user-friendly interface and generate insightful reports with just a click. Whether it’s for a quick analyzer health check or to investigate specific events, our manual reports put valuable data at your fingertips instantly.
Empower your operations with next-level data insights

Complete visibility of analyzer parameters in a report, as trends and historical data

ABB Ability™ Condition Monitoring for measurement devices monitors close to 100 parameters related to analyzer health and provides complete visibility of crucial analyzer parameters on the go helping you to make informed decision.

- **Real-time insights**: React swiftly to changing conditions and mitigate potential risks with live analyzer parameter monitoring.
- **Predictive maintenance**: Leverage trend analysis to predict and prevent failures, reducing downtime and maintenance costs.
- **Analyzer performance optimization**: Use historical data to optimize equipment performance and improve overall productivity.
- **Streamlined operations**: Simplify processes with user-friendly interfaces and seamless data export capabilities.
Invest now and save on your maintenance cost

The return on investment of ABB Ability™ Condition Monitoring for measurement devices is realized when the predictive approach of the solution eliminates the need for costly reactive maintenance.

By routinely monitoring your assets and identifying needed adjustments and upgrades in advance, costly downtime associated with reactive maintenance is avoided, as are fines resulting from failing to meet the emissions monitoring demand of your local regulatory bodies.

Ask your ABB Service representative if you would like to perform a quantitative analysis of the return on your investment for your site.

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03 Typical length of service event resolution for various condition monitoring options.

<table>
<thead>
<tr>
<th>Time</th>
<th>Information collection</th>
<th>Analysis</th>
<th>Scheduling + travel</th>
<th>Resolution</th>
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<tr>
<td>Traditional on-site service</td>
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<tr>
<td>Information collection</td>
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<td>On-site service with condition monitoring</td>
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<td>Remote assistance and condition monitoring</td>
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Identifies changes in device condition and produces the necessary information for customer’s on-site personnel to leverage their own expertise.

Faster resolution due to case-specific service recommendations and better preparation of service visits.

Customer value

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Solution architecture

- ABB Service
- PC/Laptop
- Micro Edge device
- ABB Analyzer

Customer

- Maintenance

- 3G/4G connection/corporate network
- Industrial Micro Edge with remote service, 3G/4G/Ethernet, remote HMI, Diagnostic SW

Supported products

<table>
<thead>
<tr>
<th>Features</th>
<th>AO/EL</th>
<th>FTPA</th>
<th>ACF-NT</th>
<th>ACF5000</th>
<th>PGC</th>
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<tbody>
<tr>
<td>On demand report</td>
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<td>Failure event report</td>
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<td>Reports - connection failure</td>
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<tr>
<td>Reports - maintenance report</td>
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<tr>
<td>Trends</td>
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<td>Web based configuration</td>
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</table>
An end-to-end enhanced cybersecure solution

Edge device that enables secure connectivity
- Hardened edge gateway: Hardened to prevent any unintended access/use
- DSAC* certified: Checking unwanted opened ports, robustness test, vulnerability assessment
- Built-in firewalls
- Secureboot
- Built in TPM 2.0 chip
- Quarterly update of edge device with recent cybersecurity patches
- Remote support with secure access using TeamViewer Tensor

*DSAC- ABB operates a cyber security assurance program to test the security and robustness of our products. As part of this program, ABB’s Device Security Assurance Center (DSAC), performs a verification of our products prior to their release to the market. DSAC is a dedicated ABB internal center independent from the product development organization. DSAC’s cyber security test process is compliant with SVV-3A1, SVV-3A3, SVV-3A5, SVV-3B, SVV-3C1, SVV-3C2, SVV-3D, SVV-4, and SVV-5 requirements of IEC62443-4-1: 2018 Secure Product Development Lifecycle Requirements and meets Maturity Level 3.

The products undergo applicable robustness and security tests, which include port scanning, network flooding, vulnerability scanning, protocol fuzzing, and security testing for web applications, mobile applications, and APIs. Various commercial and non-commercial tools are used to perform the robustness and security tests.
Measurement Care Agreement

Measurement Care is a service agreement that bundles the services you routinely need, and more, into a single contract. ABB provides lifecycle services including spare parts management, performance based services and rapid response packages to get your process moving.

The modular Care agreement is arranged into three categories to help identify the support you need:

**MEASUREMENT CARE AGREEMENT**

- **PERFORMANCE IMPROVEMENT**
- **LIFECYCLE MANAGEMENT**
- **RAPID RESPONSE**

**Package 1 - Rapid Response**
Guaranteed urgent action within an agreed time frame. You can count on professional prioritized support from highly skilled specialists.

**Package 2 - Lifecycle Management**
Product age and condition can adversely affect the performance of your process. An installed base assessment coupled with an effective preventive maintenance program improves uptime while reducing capital costs.

**Package 3 - Performance Improvement**
Remote and on-site monitoring identifies ways to improve process performance. Monitoring allows accurate predictive maintenance plans to be employed to keep products running at optimum levels.

ABB Ability Condition Monitoring for measurement devices is offered under the Performance Improvement category. The standard package includes:

- MicroEdge with internal SIM Modem (Edge Device)
- TeamViewer Tensor host (Remote desktop application)
- McAfee AntiVirus

As part of our digital offering, ABB provides on-demand expert availability and remote support.

You can choose to add the following options as part of a Measurement Care Agreement:

- Dedicated support channel
- Hardware and software supply and installation
- Guaranteed response time
- Up to 24/7 specialist availability
- Up to 24/7 spare parts availability
- Access to centralised Collaborative Operations Center
- Integration into my ABB customer portal
Service delivery process

Analyzer Installed Base (IB) mapping on site and service scope planning
You and local ABB experts will review the IB of analyzers to be considered in the scope of service. Service agreement will be customized to your need. Based on your specific requirement ABB expert will choose the digital solution suited for your need from the range of scalable digital solutions supplied by ABB.

Finalizing Measurement Care Agreement
You can choose from various options available in a service agreement (Measurement Care Agreement) ranging from self service to rapid response to condition monitoring to predictive maintenance.

Connecting analyzers to MicroEdge devices
ABB Service engineer will visit the site and perform the installation of the Edge device and establish connection with analyzers for remote assistance.

Live data access and UI access with flexibility to select report type
You or ABB Service Engineer can access the live data of the analyzer using the software. You get access to the UI of the solution where you can monitor the current status of your analyzers, review and schedule reports, as well as have the option to download the historical data.

Making the right decision
Data enabling proactive and informed decision making reducing downtime and costs.
To find your local ABB contact visit:
abb.com/service

For more product information visit:
www.abb.com/measurement